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Supplement of

The Bortoluzzi Mud Volcano (Ionian Sea, Italy) and its potential for tracking the seismic cycle of active faults

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Introduction

Supporting material contains two tables and three figures as supplement to the main text.

Additional supporting tables

Date (yyyymmdd)	UTC Time (hh:mm:ss.cc)	Latitude (°N)	Longitude (°E)	Depth (km)	Md	MI
19851121	23:56:32.16	37.8955	16.0202	0.03	2.6	
19851229	12:18:00.51	37.6732	16.4792	11.26	3.0	
19860201	13:44:55.95	37.6853	16.0015	27.58	2.5	
19870419	12:30:31.97	37.7972	16.1732	3.07	3.4	
19870419	19:44:15.95	37.8780	16.1058	0.2	2.9	
19880603	12:41:43.10	37.6802	16.5248	31.16	2.5	2.0
19880801	19:28:15.68	37.8808	16.3282	29.51	3.0	2.2
19881023	13:41:54.96	37.9208	16.0888	0.15	2.4	
19890113	11:56:31.38	37.7672	16.2522	39.92	2.6	2.2
19890613	21:13:55.06	38.0547	16.3642	11.25	2.8	1.9
19890717	13:57:25.70	37.6060	16.4513	28.34	2.6	2.2
19891029	12:44:49.93	37.8642	16.3093	31.78	2.4	1.8
19900306	20:51:22.54	37.7282	16.2113	25.89	2.4	1.8
19900325	22:30:42.18	37.6903	16.2258	32.69	2.3	1.9
19901006	05:52:38.98	37.9513	16.0980	29.55	2.3	
19910116	20:18:10.45	37.9718	16.0163	7.37	2.9	2.8
19910716	00:41:36.05	38.0713	16.2038	10.92	2.4	
19911011	00:14:41.59	37.6447	16.3388	34.07	3.2	2.8
19951007	05:41:58.79	38.0785	16.0225	10.61	3.2	2.8
20021201	02:17:43.59	37.8757	16.1337	4.83	2.4	
20021202	02:22:04.57	37.8272	16.2090	4.47	2.7	
20030103	11:44:04.03	37.6185	16.1377	18.23	2.5	
20030312	05:49:22.86	38.0772	16.0022	5.43	3.0	2.3
20030612	18:51:27.04	37.6082	16.4098	28.63	3.2	3.5
20030709	22:19:17.19	37.9750	16.2527	14.31	2.6	1.7
20031210	06:38:05.47	37.6133	16.3245	33.01	2.6	2.6
20040704	06:49:17.93	38.0018	16.0557	5.86	2.4	2.0
20040704	08:46:25.71	37.9848	16.1170	6.92	2.3	1.9
20040707	19:16:57.13	37.9955	16.1187	3.01	2.3	2.1
20040715	21:17:20.34	38.0177	16.0382	3.35	2.7	2.5
20040717	16:43:35.49	37.9212	16.4295	4.29	2.8	2.6
20040816	03:13:29.43	37.7943	16.2753	33.96	2.5	2.0
20041117	04:24:32.43	38.0408	16.0392	6.44	2.5	2.4
20050323	21:59:25.45	37.6413	16.2912	30.28	2.5	2.0
20050503	18:41:12.50	37.9628	16.0937	10.01	1.7	
20050503	19:34:49.90	38.0080	16.1682	9.58	1.6	
20050513	14:31:19.96	37.7543	16.1645	32.59	2.1	
20050617	20:53:21.97	38.0817	16.1515	13.11	2.6	
20050910	00:48:59.05	38.0958	16.2702	12.1	1.7	
20051002	01:12:32.81	37.7655	16.0492	34.38	2.2	

20060421	18:12:56.85	37.6153	16.2015	28.15	1.9	
20060530	11:30:40.54	37.6212	16.5143	30.02	4.2	
20060530	11:38:34.44	37.6163	16.4632	32.76	3.5	
20060530	13:02:51.33	37.6008	16.4608	31.84	2.4	
20060530	22:16:54.00	37.6145	16.4350	32.84	2.7	
20060531	13:56:57.70	37.6155	16.4372	27.1	2.9	
20060619	00:14:23.17	37.6525	16.3210	31.01	2.0	
20060720	03:48:05.59	37.6342	16.1395	27.91	2.1	
20060730	09:53:36.02	38.0093	16.2888	10.17	2.8	
20060730	10:04:58.24	38.0040	16.2828	11.95	1.6	
20060801	22:09:47.40	37.7652	16.0215	25.69	1.9	
20060830	07:53:55.36	37.6597	16.2517	27.97	2.8	
20061003	04:58:28.51	37.7792	16.2588	11.65	2.6	
20061229	12:24:32.87	37.6073	16.0407	34.82	2.2	
20070310	19:52:16.52	38.0255	16.1078	35.94	2.3	
20070421	06:15:43.47	37.6903	16.3018	30.21	3.0	
20070515	02:44:25.39	37.7540	16.1197	22.04	2.2	
20070602	04:33:34.97	37.7773	16.1377	26.16	2.0	
20070613	10:08:01.78	38.0175	16.4470	31.28	1.6	
20070619	12:41:06.37	37.6733	16.4775	26.96	1.9	
20070623	19:19:22.61	37.6175	16.2180	18.44	1.9	
20070702	23:05:24.50	38.0005	16.5470	38.22	1.6	
20070803	04:14:22.74	37.9570	16.3065	19.3	2.1	
20070803	07:17:17.05	37.9750	16.3172	16.32	2.0	
20070803	12:42:02.04	37.9415	16.3312	7.19	2.4	
20070803	16:54:20.35	38.0090	16.2393	27.95	1.7	
20070816	22:24:49.65	37.8882	16.4192	25.93	1.6	
20070913	14:45:41.50	37.9733	16.3315	10.85	1.7	
20070913	17:19:10.75	37.8937	16.3368	10.01	2.9	
20080110	09:02:57.10	37.6312	16.0713	27.99	2.2	
20080116	19:43:46.68	37.7818	16.2277	34.33	2.7	
20080120	01:50:50.97	38.0550	16.0753	14.64	1.5	
20080124	12:05:31.75	38.0537	16.0717	14.31	1.6	
20080201	19:10:23.25	37.9010	16.0245	5.81	2.1	
20080306	11:05:57.50	38.0822	16.2000	14.81	1.6	
20080306	15:53:41.33	38.0747	16.2203	15.79	2.1	
20080308	04:51:52.43	38.0873	16.2045	12	1.8	
20080509	04:34:50.80	37.6428	16.1038	29.12	1.7	
20080726	09:10:30.31	37.8418	16.1820	39.9	2.1	
20081020	09:10:31.02	37.8638	16.0417	5.49	1.7	2.2
20081102	06:46:43.72	37.6338	16.4657	33.11	3.4	1.7
20090128	00:21:49.93	38.0720	16.1932	7.07	3.0	2.3
20090310	20:33:05.37	38.0628	16.2238	10.25	2.0	2.3
20090311	04:51:56.64	37.8397	16.4040	29.59	2.0	3.1
20090425	10:15:35.96	37.6247	16.3542	33.06	3.1	
20090526	11:04:12.44	37.9940	16.2785	13.73	1.8	

20090528	02:55:53.04	37.9652	16.1055	6.64	1.2	
20090604	18:47:59.08	37.6580	16.2803	31.85	1.7	
20090628	01:31:58.47	37.6327	16.0060	17.54	1.7	
20090821	14:07:03.33	37.8625	16.0960	31.1	1.5	
20090930	19:55:56.43	37.9765	16.0303	7.01	1.0	
20091013	22:25:37.36	37.7257	16.1983	28.06	2.1	
20091109	18:45:28.58	38.0713	16.4277	10.16	1.9	
20091109	19:31:53.15	38.0772	16.4210	15.41	1.5	
20091110	04:40:25.49	38.0803	16.4190	9.96	2.7	
20091110	07:14:02.93	38.0995	16.4017	10.42	2.2	
20091111	22:51:11.81	38.0855	16.4263	9.27	2.5	
20091113	08:28:21.83	38.0543	16.4447	10.85	1.5	
20091116	14:08:10.71	38.0723	16.4315	12.5	1.6	
20091118	00:56:00.18	38.0720	16.4335	15.6	1.3	
20091118	06:56:03.25	38.0767	16.4333	15.7	1.5	
20091118	10:58:15.09	38.0885	16.4028	10.01	2.1	
20091118	15:48:31.29	38.1027	16.3968	4.59	2.6	
20091120	10:14:00.21	38.0717	16.4458	10.15	1.3	
20091121	10:27:49.12	38.0843	16.4135	10.25	2.2	
20091125	06:20:07.09	38.0593	16.4503	13.92	3.1	
20091211	06:34:17.61	38.0813	16.4310	12.13	2.0	
20091211	08:28:21.74	38.0797	16.4287	15.88	1.9	
20091211	09:02:33.58	38.0735	16.4312	12.44	2.1	
20091220	05:53:38.96	38.0760	16.4228	15.63	2.1	
20091223	02:11:59.85	38.0783	16.4107	9.7	2.7	
20091225	16:37:55.26	38.0993	16.4158	4.83	1.5	
20091229	03:31:01.45	37.6932	16.1437	34.97	2.3	
20100403	21:20:50.93	37.7162	16.0773	18.42	1.6	
20110527	08:29:23.10	37.9240	16.0108	33.47	2.0	
20110601	07:56:04.00	37.6580	16.1067	29.09	2.3	
20110803	02:44:49.90	37.7717	16.0723	21.64	1.6	
20110819	10:10:13.36	37.9337	16.0155	4.14	2.0	
20120422	08:30:52.98	37.7508	16.2737	37.92	1.8	
20120630	21:45:28.94	37.8802	16.2077	15.04	2.0	
20120702	05:02:32.47	38.0613	16.0263	4.6	2.0	
20120714	09:42:43.70	38.0565	16.1310	2.84	1.6	
20120717	11:11:15.44	37.9418	16.2212	15.69	2.4	
20120717	11:17:36.39	38.0307	16.2403	12.28	2.4	
20120717	11:19:55.25	38.0907	16.2852	4.98	2.5	
20120717	11:22:39.11	37.9877	16.2640	23.42	2.5	
20120718	01:31:50.62	38.0187	16.2615	17.4	2.4	
20120718	11:17:11.04	37.8852	16.1667	15.6	2.6	
20120726	09:53:34.12	37.6583	16.0908	24.03	1.9	
20120726	14:20:03.13	37.9168	16.3243	3.06	3.0	
20120731	07:27:30.42	38.0270	16.1970	22.62	2.1	
20120802	00:02:07.16	38.0568	16.2698	4.43	2.2	

20119902	18:00:20.34	38.0373	16.3210	3.98	2.8	
20121002	00:47:43.19	37.9760	16.0265	7.85	1.9	
20121003	04:24:34.04	37.9090	16.0355	8.26	1.8	
20121118	02:05:29.55	37.9948	16.2310	21.54	1.9	
20130120	01:30:13.39	37.6863	16.2873	30.95	2.1	
20130201	20:36:20.60	37.7533	16.1885	31.26	2.1	
20130312	13:49:42.94	37.7528	16.2953	28.01	2.4	
20130324	15:47:21.81	37.6783	16.4573	28.47	4.4	
20130324	20:37:50.10	37.7062	16.3175	30.54	3.1	
20130516	15:40:48.90	37.8337	16.2905	29.06	2.9	
20130721	23:41:15.28	37.7438	16.4678	31.62	2.0	
20130724	11:00:57.58	37.8597	16.5353	33.7	2.1	
20130731	02:30:59.02	37.7402	16.2977	28	2.1	
20130921	15:17:47.72	37.7873	16.3537	28.69	2.5	
20131216	23:08:43.28	38.0543	16.2352	14.59	2.8	
20140102	14:36:00.51	37.6815	16.1115	28.06	2.1	
20140118	06:17:41.12	37.8860	16.1418	33.62	3.1	
20140121	03:33:36.12	37.9937	16.1230	6.49	2.3	
20140703	22:55:38.30	37.7743	16.1965	13.65	2.0	
20140709	22:09:40.40	37.7048	16.1087	27.64	2.1	
20140721	01:05:18.93	37.8912	16.4278	33.16	2.4	
20140721	18:22:17.95	37.6978	16.3008	29.73	2.7	
20140728	21:57:54.99	37.8240	16.1790	29.79	2.3	
20141109	21:08:24.14	37.8610	16.2615	33.1	2.1	
20141112	06:27:41.83	37.6362	16.1432	25.23	2.1	
20150214	05:31:41.43	37.7132	16.1563	29.98	2.2	
20150328	08:21:54.39	37.6077	16.1653	27.99	3.1	
20150419	14:05:45.94	37.6068	16.0017	28.01	2.4	
20150604	08:49:48.55	37.7353	16.1658	31.22	2.3	
20150708	13:43:21.89	37.7795	16.2287	32.72	2.7	
20150721	10:00:46.67	37.6920	16.3807	28.85	2.0	
20150930	03:26:47.68	37.7982	16.3145	23.01	2.0	
20151004	17:08:08.98	37.6908	16.4070	29.2	2.2	
20151121	17:53:12.98	37.6332	16.1707	28.08	2.1	
20151122	10:02:59.11	37.6590	16.4327	28.03	2.5	
20151124	22:29:23.54	37.6287	16.3213	28.19	2.2	
20160103	23:55:20.58	37.7265	16.1963	37.06	2.4	
20160111	01:07:40.45	37.8003	16.0587	15.26	2.3	
20160112	05:24:28.71	37.7713	16.4463	28.04	2.5	
20160228	01:11:45.33	37.6797	16.0725	35.49	2.1	
20160509	15:50:16.29	37.6307	16.3672	33.72	2.5	
20160514	10:47:18.20	37.6343	16.4138	30.91	2.6	
20160821	21:27:42.58	37.8805	16.0333	33.3	2.4	
20160927	07:16:29.18	37.7863	16.2637	22.9	2.5	
20161101	04:32:27.48	37.6427	16.4178	27.98	2.4	
20170211	00:04:30.95	37.6813	16.2428	27.7	2.2	

Table S1: Data for earthquakes in the BMV area shown as epicenters in Figs. 1 and 2(a) and as hypocenters in Fig. 2b. Data are from the public database of INGV Centro Nazionale Terremoti (<http://cnt.rm.ingv.it/>), relocated by one of us (T.S.). See text for further details.

N°	Date (yyyymmdd)	UTC Time (hh:mm:ss.cc)	Latitude (°N)	Longitude (°E)	Depth (km)	Strike (°)	Dip (°)	Rake (°)	Mw
6	20060730	09:53:35.90	37.99	16.31	6.0	292	64	-7	2.70
15	20090316	00:28:05.90	37.67	15.96	28.0	34	60	-24	3.00
20	20091125	06:20:07.30	38.05	16.45	16.0	341	62	-43	3.20
29	20120726	14:20:03.00	37.90	16.34	16.0	134	83	-19	3.10
2b	20130324	15:47:22.00	37.76	16.50	30.0	257	87	178	4.56

Table S2: Data for the earthquake focal mechanisms shown in Figs. 1 and 2. Data are from the European-Mediterranean Regional Centroid-Moment Tensors (RCMT) catalog (<http://rcmt2.bo.ingv.it/>) (red beach ball in Figs. 1 and 2) and from previous papers (blue beach balls in Figs. 1 and 2) by Orecchio et al. (2014) and Polonia et al. (2016). N° refers to the numbers shown in Figs. 1 and 2 close to each focal mechanism.

Figure S1. High-resolution multibeam bathymetry of the Ionian Sea acquired during the Seismofaults 2017 cruise. Note that, with this work, we will freely release the raw numerical data for 4970 km² of newly-acquired high-resolution bathymetric data (graphically shown in this figure) for the Ionian Sea including the BMV. The raw data are externally hosted and indexed with doi: XXXX.

Figure S2. Non-interpreted high-resolution version of Fig. 7.

Figure S3. Non-interpreted high-resolution seismic reflection image shown in Fig. 10(e).